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PATENT Customer No. 22,852

Attorney Docket No. 9140.0014

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Demaray, et al.) Group Art Unit: 1731
Serial No.: 09/903,081) Examiner: John M. Hoffmann
Filed: July 10, 2001) Confirmation No. 1225
For: AS-DEPOSITED PLANAR OPTICAL WAVEGUIDES WITH LOW SCATTERING LOSS AND METHODS FOR THEIR MANUFACTURE))))

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(c)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final action, Quayle action, or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c), this Information Disclosure Statement

is accompanied by a fee of \$180.00 as specified by Section 1.17(p). The Commissioner is hereby authorized to charge this fee to our Deposit Account No. 06-0916.

Several references were submitted with Information Disclosure Statement of
July 10, 2001, and not considered by the Examiner. Applicants resubmit the Hubner et al, Lee et
al, Marquez et al, Ohkubo et al, and Ono et al. references, providing requested information
regarding the date of publication of these references as requested by the Examiner.

Copies of the listed documents are attached.

With regard to the Examiner's objection to Schermer et al. reference, Applicants are unable to provide a better copy of the Schermer et al. reference. The copy submitted herewith is the best copy available to the Applicants. Applicants respectfully request that the Examiner consider this reference as provided.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claims in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any additional fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: August 10, 2004

Gary J. Edwards Reg. No. 41,008

OMB No. 0651-0011

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	09140-0014-00000	Appln. No.	09/903,081	
Applicant	Demaray et al.	-		
Filing Date	July 10, 2001	Group:	1731	

AUG 1 0 2004

J. J	U.S. PATENT DOCUMENTS					
Examiner Initial*	Document Number	Issue/ Publication Date	Name	Class	Sub Class	Filing Date If Appropriate
	2001/0027159	Oct. 04, 2001	Kaneyoshi	501	152	
	2002/0106297	Aug. 08, 2002	Ueno et al.	419	12	
	2003/0019326	Jan. 30, 2003	Han et al.	45	245	
	2003/0063883	Apr. 3, 2003	Demaray et al.	385	129	
	2003/0175142	Sep. 18, 2003	Milonopoulou et al.	419	49	
	4,437,966	Mar. 7, 1961	Hope et al	204	298	
	4,915,810	Apr. 10, 1990	Kestigian et al.	204	298.04	
	4,978,437	Dec. 18, 1990	Wirz	204	192.	
	5,085,904	Feb. 4, 1992	Deak et al.	428	35.7	
	5,107,538	Apr. 21, 1992	Benton et al.	385	130	
	5,119,460	Jun. 2, 1992	Bruce et al.	385	142	
	5,174,876	Dec. 29, 1992	Buchal et al.	427	526	
	5,200,029	Apr. 6, 1993	Bruce et al.	156	657	
	5,206,925	Apr. 27, 1993	Nakazawa et al.	385	142	
	5,237,439	Aug. 17, 1993	Misono et al.	359	74	
	5,225,288	Jul. 6, 1993	Beeson et al.	428	475.5	·
	5,252,194	Oct. 12, 1993	Demaray et al.	204	298	
	5,303,319	Apr. 12, 1994	Ford et al.	385	131	
	5,381,262	Jan. 10, 1995	Arima et al.	359	341	
	5,427,669	Jun. 27, 1995	Drummond	204	298.2	

		Date Considered
		nce considered, whether or not citation is in conformance with MPEP 609; draw line on if not in conformance and not considered. Include copy of this form with next on to applicant.
Form PTO 14	149	Patent and Trademark Office - U.S. Department of Commerce

Atty. Docket No.	09140-0014-00000	Appln. No.	09/903,081		
Applicant	Demaray et al.				-
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U.S. PATENT DOCUMENTS						
Examiner Initial*	Document Number	Issue/ Publication Date	Name	Class	Sub Class	Filing Date If Appropriate
OIPE	5,457,569	Oct. 10, 1995	Liou et al.	359	344	
C106	5,475,528	Dec. 12, 1995	LaBorde	359	341	
AUG 1 0 2004	5,483,613	Jan. 9, 1996	Bruce et al.	385	129	
3 28	5,555,127	Sep. 10, 1996	Abdelkader et al.	359	341	
ADEMBALY	5,563,979	Oct. 8, 1996	Bruce et al.	385	142	
	5,565,071	Oct. 15, 1996	Demaray et al.	204	192	
	5,603,816	Feb. 18, 1997	Demaray et al.	204	298	
	5,607,789	Mar. 4, 1997	Treger et al.	429	90	
	5,613,995	Mar. 25, 1997	Bhandarkar et al.	65	384	
-	5,654,054	Aug. 5, 1997	Tropsha et al.	428	36.6	
	5,654,984	Aug. 5, 1997	Hershbarger et al.	375	257	
	5,693,956	Dec. 2, 1997	Shi et al.	257	40	
	5,718,813	Feb. 17, 1998	Drummond	204	192.2	
	5,719,976	Feb. 17, 1998	Henry et al.	385	50	
	5,792,550	Aug. 11, 1998	Phillips et al.	428	336	
	5,831,262	Nov. 3, 1998	Greywall et al.	250	227	,
	5,841,931	Nov. 24, 1998	Foresi et al.	385	131	
	5,847,865	Dec. 8, 1998	Gopinath et al.	359	343	
	5,853,830	Dec. 29, 1998	McCaulley et al.	428	35.7	
	5,855,744	Jan. 5, 1999	Halsey et al.	204	192	
	5,900,057	May. 4, 1999	Buchal et al.	117	109	

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	Examiner		Date Considered
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Atty. Docket No.	09140-0014-00000	Appln. No.	09/903,081		~ ~
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		U.S. PATENT D	OCUMENTS		W40E	MARI
Examiner Initial*	Document Number	Issue/ Publication Date	Name	Class	Sub Class	Filing Date If Appropriate
	5,948,215	Sep. 7, 1999	Lantsman	204	192.12	
	5,961,682	Oct. 5, 1999	Lee et al.	65	384	
	5,966,491	Oct. 12, 1999	DiGiovanni	385	127	
	5,977,582	Nov. 2, 1999	Fleming et al.	257	310	
	6,001,224	Dec. 14, 1999	Drummond	204	192.12	
· · · · · · · · · · · · · · · · · · ·	6,024,844	Feb. 15, 2000	Drummond et al.	204	192.12	
	6,051,114	Apr. 18, 2000	Yao et al.	204	192.3	,
	6,051,296	Apr. 18, 2000	McCaulley et al.	428	35.7	
	6,058,233	May 2, 2000	Dragone	385	46	
	6,080,643	Jun. 27, 2000	Noguchi et al.	438	487	
	6,093,944	Jul. 25, 2000	VanDover	257	310	
	6,106,933	Aug. 22, 2000	Nagai et al.	428	212	
	6,146,225	Nov. 14, 2000	Sheats et al.	445	24	
	6,157,765	Dec. 5, 2000	Bruce et al.	385	129	
	6,162,709	Dec. 19, 2000	Raux et al.	438	513	
	6,176,986 B1	Jan. 23, 2001	Watanabe et al.	204	298.13	
	6,248,291 B1	Jun. 19, 2001	Nakagama et al.	419	46	
	6,280,585 B1	Aug. 28, 2001	Obinata et al.	204	298.19	· · · · · · · · · · · · · · · · · · ·
	6,287,986 B1	Sep. 11, 2001	Mihara	438	763	
	6,290,822 B1	Sep. 18, 2001	Fleming et al.	204	192.22	
	6,302,939 B1	Oct. 16, 2001	Rabin et al.	75	338	

Examiner		Date Considered
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			U.S. PATENT D	OCUMENTS	<u>-</u>		
	Examiner Initial*	Document Number	Issue/ Publication Date	Name	Class	Sub Class	Filing Date If Appropriate
ľ		6,344,419 B1	Feb. 5, 2002	Forster et al.	438	758	
ł	OHER	6,350,353 B2	Feb. 26, 2002	Gopalraja et al.	204	192.3	
Ī	8	6,358,810 B1	Mar. 19, 2002	Dornfest et al.	438	396	
	AUG 1 0 2004 y	6,409,965 B1	Jun. 25, 2002	Nagate et al.	419	26	
*	RADEMER	6,413,382 B1	Jul. 2, 2002	Wang et al.	204	192.12	
Ī	CODE DE LA CONTRACTION DE LA C	6,416,598 B1	Jul. 9, 2002	Sircar	148	688	
ľ		6,537,428 B1	Mar. 25, 2003	Xiong et al.	204	192.13	
ľ		6,602,338 B2	Aug. 5, 2003	Chen et al.	252	301.4	

FOREIGN PATENT DOCUMENTS						
Document Publication Number Date		Country	Class	Sub Class	Translation Yes or No	
	EP 0 510 883 A2	10/28/92	Europe	H 01 S	3/23	
	EP 0 820 088 A2	01/21/98	Europe	H 01 J	37/34	
	EP 0 867 985 B1	09/01/98	Europe	H 01 S	3/06	
	JP 6-010127 A	01/18/94	Japan	C 23 C	14/35	Abstract
	JP 6-100333 A	12/04/94	Japan	C 03 C	21/00	Abstract
	WO 00/21898 A1	04/01/00	PCT	C 03 C	13/04	-
	WO 00/22742 A2	04/01/00	PCT	H O4 B		
	WO 00/36665 A1	06/22/00	PCT	H 01 L	51/20	
	WO 02/12932 A2	02/14/02	PCT	H 01 S	3/16	

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	OIPE	FOREIGN PATENT DOCUMENTS					
1	AUC 1 0 2004 W	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
ľ	AUG TO SEE	WO 96/23085 A1	08/01/96	PCT	C 23 C	14/34	
	TO BADENARY S	WO 97/35044 A1	09/25/97	PCT	C 23 C	14/40	

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	AFFINITO et al., "Polymer-Oxide Transparent Barrier Layers," Society of Vacuum Coaters, 39th Annual Technical Conference Proceedings, May 5-10, 1996, Philadelphia, PA, pp. 392-397.
:	ALDER et al., "High-Efficiency Fiber-to-Chip Coupling Using Low-Loss Tapered Single-Mode Fiber," <i>IEEE Photonics Technology Letters</i> , 12(8):1016-1018 (August 2000).
	ALMEIDA et al., "Nanotaper for compact mode conversion," <i>Optics Letters</i> , 28(15):1302-1304 (August 2003).
	BARBIER et al, "Amplifying Four-Wavelength Combiner, Based on Erbium/Etterbium-Doped Waveguide Amplifiers and Integrated Splitters", <i>IEEE PHOTONICS TECHNOLOGY LETTTERS</i> , 9:3, pp 315-317 (March 1997).
	BARBIER, Denis, "Performances and potentioal applications of erbium doped planar waveguide amplifiers and lasers," GeeO, pp. 58-63 (1997).
·	BEACH R.J., "Theory and optimization of lens ducts," Applied Optics, 35:12:2005-2015 (Apr. 1996).
	BELKIND et al., "Using pulsed direct current power for reactive sputtering of Al ₂ O ₃ ," <i>J. Vac. Sci. Technol.</i> A 17(4), pp. 1934-40 (Jul. 1999).
	BORSELLA et al., "Structural incorporation of silver insoda-lime glass by the ion-exchange process: a photoluminescence spectroscopy study", Applied Physics A 71, pp. 125-132 (2000).
	BYER et al., "Nonlinear Optics and Solid-state Lasers," IEEE Journal on Selected Topics in Quantum Electronics, Vol. 6, No. 6, pp. 921-929 (Nov. 2000).
	CHANG, C.Y. (edited by), "ULSI Technology," The McGraw-Hill Companies, Inc., New York, 1996, Chapter 4, pp. 169-170, 226-231 (1996).
	DELAVAUX et al., "Integrated optics erbium ytterbium amplifier system in 10 Gb/s fiber transmission experiment", 22nd European Conference on Optical Communication - ECOC' 96, Oslo, 4 pages, (1996).

Examiner		Date Considered		
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	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	FLYTZANIS et al, "nonlinear Optics in Composite Materials," E. Wolf, Progress in Optics XXIX (c) Elsevier Scince Publishers B.V., pp. 323-425 (1991).
SEICE 90	FUJII et al, "1.54 mm photoluminescence of Er ³⁺ doped into SiO ₂ films containing Si nanocrystals: Evidence for energy transfer from Si nanocrystals for Er ³⁺ ", <i>Appl. Phys. Lett.</i> 71 (9), pp. 1198-1200 (Sept. 1997).
	GARCIA, C. "Size Dependence of Lifetime and Absorption Cross Section of Si Nanocrystals Embedded in SiO ₂ ," <i>Appl. Phys. Lett.</i> , 82:10, pp. 1595-7 (March 10 2003).
	HAN, Hak-Seung et al. "Optical Gain at 1.54 μm in Erbium-Doped Silicon Nanocluster Sensitized Waveguide," <i>Appl. Phys. Lett.</i> , 79:27, pp. 4568-70 (December 31, 2001).
	HAYAKAWA et al, "Field enhancement effect of small Ag particles on the fluorescence from Eu ³⁺ -doped SiO ₂ glass", <i>Appliced Physics Letters</i> , 74:11, pp. 1513-1515 (15 March 1999).
	HAYAKAWA et al., "Enhanced fluorescence from Eu ³⁺ owing to surface plasma oscillation of silver particles in glass", Journal of Non-Crystalline Solids 259, pp. 16-22 (1999).
	HEHLEN et al. "Spectroscopic Properties of Er³+ - and Yb³+-doped Soda-Lime Silicate and Aluminosilicate Glasses," Physical Review B, Vol. 56, No. 15, October 15, pp. 9302-9318 (1997).
	HEHLEN et al. "Uniform Upconversion in High-Concentration Er³+-doped Soda Lime Silicate and Aluminosilicate Glasses," Optics Letters, Vol. 22, No. 11, June 1, pp. 772-774 (1997).
	HUBNER, J. and Guldberg-Kjaer, S., "Planar Er-and Yb-Doped Amplifiers and Lasers," COM Technical University of Denmark, 10.sup.th European Conf. On Integrated Optics, Session WeB2, April 4-6, 2001, Paderborn, Germany, pp. 71-74 (April 4, 2001).
	ITOH, M. et al., "Large reduction of singlemode-fibre coupling loss in 1.5% delta planar lightwave circuits using spot-size converters," <i>Electronics Letters</i> , 38(2):72-74 (2002).
	JACKSON et al. "An Accurate Compact EDFA Model," Dept. of Electrical and Computer Engineering, University of BC (1999).
	JOHNSON, J.E. et al., "Monolithically Integrated Semiconductor Optical Amplifier and Electroabsorption Modulator with Dual-Waveguide Spot-Size Converter Input," <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 6(1):19-25 (2000).
	KATO, Kuniharu et al., "PLC Hybrid Integration Technology and Its Application to Photonic Components," <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 6(1):4-13 (2000).

Examiner		Date Considered		
*Examiner:		rence considered, whether or not citation is in conformance with MPEP 609; draw line tion if not in conformance and not considered. Include copy of this form with next tion to applicant.		
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Atty. Docket No.	09140-0014-00000	Appln. No.	09/903,081
Applicant	Demaray et al.		
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		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	*2.105	KELLY et al., "Reactive pulsed magnetron sputtering process for alumina films," <i>J. Vac. Sci. Technol.</i> A 18(6), pp. 2890-96 (Nov. 2000).							
20	OFFICE VA	KELLY et al., "Control of the structure and properties of aluminum oxide coatings deposited by pulsed magnetron sputtering," <i>J. Vac. Sci. Technol.</i> A 17(3), pp. 945-953 (May 1999).							
نظ	AES	KIK, P.G. et al. "Gain Limiting Processes in Er-doped Si Nanocrystal Waveguides in SiO ₂ ," <i>J. Appl. Phys.</i> , 91:1, pp. 534-6 (January 1, 2002).							
		LANGE et al, "High Gain Ultra-Short Length Phosphate glass Erbium-Doped Fiber Amplifier Material", OSA Optical Fiber Communications (OFC), 3 pages (2002).							
		LAPORTA et al, "Diode-pumped cw bulk Er: Yb: glass laser", 1952 Optics Letters, 16:24, 6 pages (Dec. 15, 1991).							
		LEE et al, "Effect of size and roughness on light transmission in a S/SiO.sub.2 waveguide: Experiments and model," <i>Appl. Phys. Lett.</i> Vol. 77, No. 11 (Sept. 11, 2000).							
		LOVE, J.D. et al., "Quantifying Loss Minimisation in Single-Mode Fibre Tapers," <u>Electronics Letters</u> , 22(17):912-914 (1986).							
		MARQUES, P.V.S. et al., "Planar Silica-on-Silicon Waveguide Lasers Based in Two Layer Core Devices," 10.sup.th European Conference on Integrated Optics, Session WeB2, April 4-6, 2001, Paderborn, Germany, pp. 79-82 (April 4, 2001).							
		MEIJERINK et al, LUMINESCENCE OF AG ⁺ IN CRYSTALLINE AND GLASSY SrB ₄ 0 ₇ , Journal of Physics and Chemistry of Solids, Vol. 54, No. 8, pp. 901-906 (1993).							
		MESNAOUI et al, "Spectroscopic properties of AG ⁺ ions in phospage glasses of NaPO ₃₋ AgPO ₃ system", EUROPEAN JOURNAL OF SOLID STATE AND INORGANIC CHEMISTRY, Vol. 29, pages 1001-1013 (1992).							
		MITOMU, O. et al., "Design of a Single-Mode Tapered Waveguide for Low-Loss Chip-to-Fiber Coupling,: IEEE Journal of Quantum Electronics, 30(8):1787-1793 (1994).							
		OHKUBO et al., "Polarization-Insensitive Arrayed-Waveguide Grating Using Pure Si)2 Cladding," Fifth Optoelectronics and Communication Conference (OECC 2000) Technical Digest, 2 pages (Jul. 11, 2000).							
		OHTSUKI et al., "Gain Characteristics of a high concentration Er ³⁺ -doped phosphate glass waveguide", <i>J. Appl. Phys.</i> 78(6), pp. 3617-3621 (1995).							

Examiner		Date Considered
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Applicant	Demaray et al.		
Filing Date	July 10, 2001	Group:	1731

6	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
EICE 30	ONO et al., "Design of a Low-loss Y-branch Optical Waveguide," Fifth Optoelectronic and Communications Conference (OECC 2000) Technical Digest, 2 pages (Jul. 11, 2000).
Et	PAN et al., "Planar Er3+-doped aluminosilicate waveguide amplifier with more than 10 dB gain across C-band," Optical Society of America, 3 pages (2000).
	PETERS et al., "Formation mechanism of silver nanocrystals made by ion irradiation of Na ⁺ Ag ⁺ ion-exchanged sodalime silicate glass", Nuclear Instruments and Methods in Physics Research B 168, pp. 237-244 (2000).
	RAJARAJAN, M. et al., "Numerical Study of Spot-Zise Expanders for an Efficient OEIC to SMF Coupling," <i>IEEE Photonics Technology Letters</i> , 10(8):1082-1084 (1998).
	RAMASWAMY et al., "Ion-Exchanged Glass Waveguides: A Review", Journal of Lightwave Technology, Vol. 6, No. 6, pp. 984-1001 (1988).
	SCHERMER, R. et al., "Investigation of Mesa Dielectric Waveguides,", Proceedings of the OSA Integrated Photonics Research Topical Meeting and Exhibit, Paper No. IWB3 (Jun. 11, 2001).
	SCHILLER et al. "PVD Coating of Plastic Webs and Sheets with High Rates on Large Areas," European Materials Research Society 1999 Spring Meeting, June 1-4, 1999, Strasbourg, France, (June 1999).
	Second International Symposium of Polymer Surface Modification: Relevance to Adhesion, Preliminary Program (1999).
	SEWELL, P. et al., "Rib Waveguide Spot-Size Transformers: Modal Properties," <i>Journal of Lightwave Technology</i> , 17(5):848-856, (1999).
	SHAW et al. "Use of Vapor Deposited Acrlate Coatings to Improve the Barrier Properties of MetallizedFilm," Society of Vacuum Coaters 505/856-7168, 37th Annual Technical Conference Proceedings, pp. 240-244 (1994).
<u></u>	SHIN et al. "Dielectric and Electrical Properties of Sputter Grown (Ba,Sr)TiO ₃ Thin Films," <i>J. Appl. Phys.</i> , Vol. 86, No. 1, pp. 506-513 (July 1999).
	SLOOFF et al, "Optical properties of Erbium-doped organic polydentate cage complexes", J. Appl. Phys. 83, pp. 497-503 (Jan. 1998).
· · · · · · · · · · · · · · · · · · ·	SMITH, R.E., "Reduced Coupling Loss Using a Tapered-Rib Adiabatic-Following Fiber Coupler," <i>IEEE Photonics Technology Letters</i> , 8(8):1052-1054 (1996).

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	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
OFFICE SW	STROHHOFR, et al. "Energy transfer to Er ³⁺ in Ag ion-exchanged glass", FOM Institute for Atomic and Molecular Physics, 10 pages.
Series Control	VAN DOVER, R.B. "Amorphous Lanthanide-Doped TiO _x Dielectric Films," <i>Appl. Phys. Lett.</i> , Vol. 74, No. 20, pp. 3041-3 (May 17 1999).
	VILJANEN et al, "Planar Optical Coupling Elements for Multimode Fibers with Two-Step Ion Migration Process", <i>Applied Physics</i> , 24:1, pp. 61-63 (January 1981).
	VILLEGAS et al, "Optical spectroscopy of a soda lime glass exchanged with silver", <i>Physics and Chemistry of Glasses</i> 37(6), pp. 248-253, (1996).
	WESTLINDER et al. "Simulation and Dielectric Characterization of Reactive dc Magnetron Cosputtered (Ta ₂ O ₅) _{1-x} (TiO ₂) _x Thin Films," <i>J. Vac. Sci. Technol.</i> B, Vol 20, No. 3, pp. 855-861 (May/Jun 2002).
	YANAGAWA, H. et al., "Index-and-Dimensional Taper and Its Application to Photonic Devices," <i>Journal of Lightwave Technology</i> , 10(5):587-591, (1992).
	YOSHIKAWA, K. et al., "Spray formed aluminium alloys for sputtering targets," Power Metallurgy, 43:3, (2000).
	ZHANG, Hongmei et al. "High Dielectric Strength, High k TiO ₂ Films by Pulsed DC, Reactive Sputter Deposition," 2001.
	Electrometals Technologies Limited, Financial Report for the year 2002, Corporate Directory, Chairman's Review, Review of Operations (2003).
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Examiner Date Considered		Date Considered
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